

Crankcase Ventilation

1966-67 OLDSMOBILE OPEN SYSTEM

DESCRIPTION

All 1966-67 non-California cars used an "open" crankcase ventilation system "Type 1". On 6 Cyl. engines the open system receives its outside air through a filtered oil filler cap. On V8 models the open system receives intake air through a breather on the valve cover. The remainder of the system is the same for both V8 and 6 Cyl. models. This "open" system consists of a valve controlled by intake manifold vacuum, appropriate hose connections between crankcase and intake manifold, unmodified crankcase breather cap on 6 Cyl. engines and a plugged breather cap on V8 engines. **NOTE** - California cars use a closed crankcase ventilation system. See appropriate story in this section.

OPERATION

Air enters system through oil breather cap on 6 cyls. and through a breather on valve cover on V8 engines, and is circulated through engine. After circulating through engine air is returned to intake manifold through an exhaust tube which extends from crankcase ventilation outlet in valve cover to a regulator valve. This valve regulates amount of air to meet changing operating conditions. When engine is stopped the valve is closed and prevents engine fumes from entering crankcase. In case of a backfire the valve is forced closed. The regulator valve is controlled by intake manifold vacuum. During idle, intake manifold vacuum is high. High vacuum overcomes the valve and seats the valve. With valve in this position, all ventilating air passes through a calibrated orifice in valve, and there is minimum ventilation. As engine speed increases and manifold vacuum decreases, the valve moves off its seat and to a full open position which increases flow of ventilating air.

SERVICE PROCEDURE

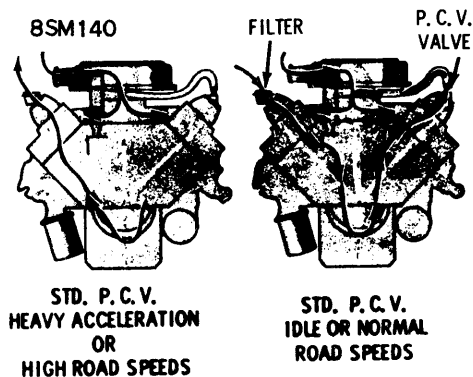
Ventilation Valve Service - Once a year or every 12,000 miles replace the ventilation valve. The rest of the system should be serviced at this interval by washing parts in kerosene and blowing out hoses with compressed air.

Ventilation Filter (V8 engines) or Breather Cap (6 Cyl. engines) Servicing - At every oil change, more often under dusty conditions, remove filter or cap, wash in kerosene and re-oil with SAE 10W-30 oil.

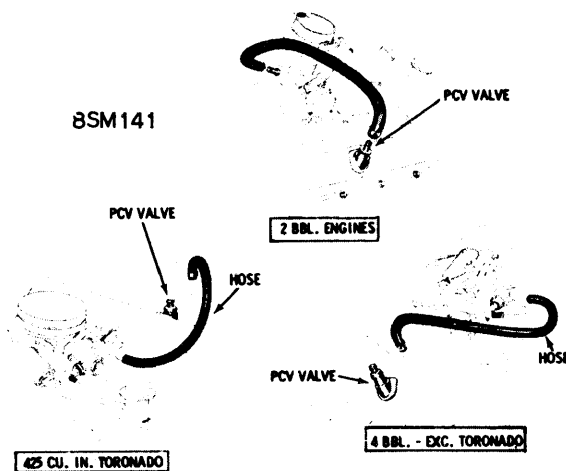
SYSTEM CHECKING

A plugged system will definitely cause rough idle. This pressure can cause engine to blow oil through engine seals and gasket. Check ventilation system as follows:

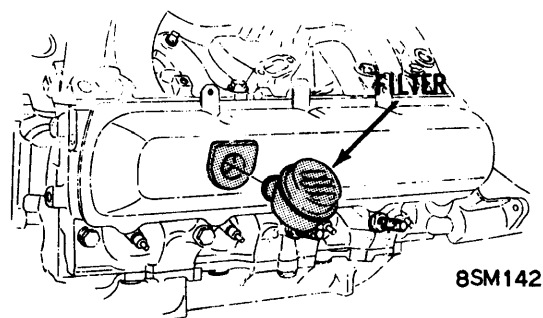
Testing Procedure - To check if rough idle is caused by crankcase vent valve connect tachometer to engine, start engine and adjust idle. Clamp off hose from valve to carburetor base. If valve is working properly, engine will drop approximately 50 to 60 RPM.



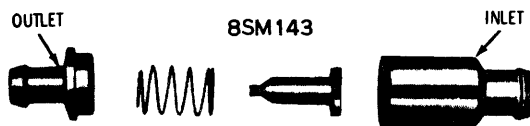
VENTILATION AIR FLOW



VENTILATION VALVE & HOSE CONNECTIONS



AIR FILTER LOCATION



VENTILATION VALVE